

AMENDMENTS TO THE CLAIMS

1-12. (Canceled)

13. (Currently Amended) A method comprising:

outputting a maximum peak force from an actuator on a manipulandum, the maximum peak force associated with a maximum power that the actuator can utilize instantaneously; and

reducing the output of the maximum peak force to ~~an~~ a-n output of a nominal peak force from the actuator when the power utilized by the actuator exceeds an average power level over a predetermined period of time, the nominal peak force associated with a maximum power that the actuator can utilize in continuous steady-state operation.

14. (Previously Presented) The method of claim 13, wherein outputting the maximum peak force occurs upon initial contact with a simulated object.

15. (Previously Presented) The method of claim 13, wherein the maximum peak force comprises a magnitude of about twice the magnitude of the nominal peak force.

16. (Previously Presented) The method of claim 13, wherein the nominal peak force is associated with an average current during operation of the actuator.

17. (Currently Amended) The method of claim 13, further comprising determining when the power utilized by the actuator exceeds the average power level over the predetermined period of time.

18. (Previously Presented) The method of claim 13, wherein the predetermined period of time is about two seconds.

19. (Canceled)

20. (Previously Presented) A method comprising:

receiving an input signal comprising a position of a manipulandum;
determining a stored force feedback effect to contribute to a force output by an actuator on the manipulandum, the stored force feedback effect comprising a force feedback effect type and a magnitude;
receiving a second signal comprising a calculated force feedback effect; and
determining a combined force feedback effect to contribute to a force output by an actuator on the manipulandum, the combined force feedback effect comprising the stored force feedback effect and the calculated force feedback effect.

21. (Previously Presented) The method of claim 20, wherein the manipulandum comprises a joystick.

22. (Previously Presented) The method of claim 20, wherein the stored force feedback effect comprises one of a detent effect, a wall effect, and a spring effect.

23. (Previously Presented) The method of claim 20, wherein the stored force feedback effect includes at least one parameter, and wherein the at least one parameter is at least one of a stiffness parameter, a damping parameter, a force parameter, and a distance parameter.

24. (Previously Presented) The method of claim 20, wherein the combined force feedback effect comprises a sum of force contributions from a plurality of stored force feedback effects.

25. (Previously Presented) The method of claim 20, further comprising:
calculating a velocity of a movement of the manipulandum based at least in part on information received from a position sensor coupled to the manipulandum, and
wherein the force output by the actuator is based at least in part on a velocity of a movement of the manipulandum.